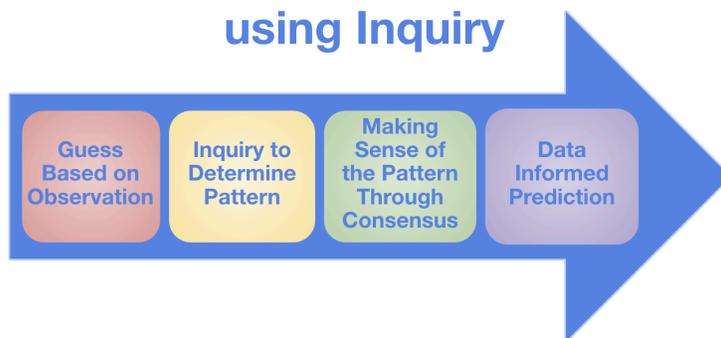




# PDXSTEM Patterns / NGSS Biology FAQs

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| <p>Why are school districts changing to a Patterns Science curriculum?</p> | <p>Districts are using Patterns for a variety of reasons:</p> <ul style="list-style-type: none"> <li>● Alignment to NGSS standards</li> <li>● Focus on science practices as opposed to facts and memorization</li> <li>● Open-source free curriculum</li> <li>● Builds long lasting understandings about how science is done</li> <li>● Incorporates relevance to diverse student populations</li> <li>● Emphasis on student collaboration</li> <li>● Incorporates robust Engineering projects</li> <li>● Each course builds on the previous course, so courses can become more rigorous.</li> <li>● Adherence to the <a href="#">Design Principles</a></li> </ul>   |
| <p>What is PMSP / PDXSTEM?</p>   | <p>The Portland Metro STEM Partnership (PMSP) is funded by grants in a regional collaboration of public and private organizations with a shared goal of transforming science, technology, engineering, and mathematics (STEM) education for P-20 students. PDXStem is the domain name for PMSP that is used in the PMSP website and emails.</p>  |
| <p>Why do our stipends come from Portland State University?</p>            | <p>PMSP has been awarded grants that must be disbursed in a specific way by institutions with experience. Portland State is the fiscal agent for PMSP and administers the grants and disburses funds to PMSP and to professional development participants.</p>   |
| <p>What is the Biology Council?</p>  | <p>The Biology curriculum (NGSS Biology / Patterns Biology) is constantly being improved by a group of teachers from around the Portland Metro Area. This group of teachers is called the <b>Biology Council</b>. The Council is committed to building a collaborative culture around the implementation and improvement of the Patterns Biology curriculum.</p> <p>Biology Council members are teachers, just like you, who teach the curriculum daily. They use their experiences with the curriculum to then collaboratively work on ways to present and teach phenomena, improve lessons, and test the ideas in their classrooms. This group needs input from teachers who are using the curriculum in order to create lessons that are engaging and impactful to a wider variety of learners across the Metro region STEM hub and Oregon.</p> |
| <p>What is Patterns Science?</p>   | <p>The essential question that the three high school Patterns science courses are built on is, “How do we find and use patterns in nature to predict the future, make data-informed decisions in the present and understand the past?” We use a process that centers on patterns to inform how we use inquiry.</p>   |

## Making Better Predictions using Inquiry



Patterns start out simply in Physics (Proportional, Linear, Quadratic, Inversely Proportional, Inverse Square) and get more complex through Chemistry (Exponential Decay, Logarithmic) and into Biology (Exponential Growth, Predator/Prey, Limits, Normal Distribution, Scatter Plots, Codons, genetic inheritance, ecological interactions, etc.) This helps to build rigor through the courses.

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| <p>What is the affiliation between Beaverton School District and PMSP?</p>  | <p>The Beaverton School District (BSD) is one of the districts that is served by the Portland Metro STEM Partnership. The Patterns curriculum originally began in BSD in response to a need for an NGSS curriculum and greater equity and access for students to enroll in advanced science courses. By opening summer PD for Patterns to teachers from other school districts through PMSP, Patterns has grown to where it is today. PMSP now supports the professional development for Patterns and the Council's improvement of the curriculum through grants.</p>  |
| <p>Why don't I have access to the Restricted Access Drive /How can I get access to the Restricted Access Drive?</p> | <p>In order to protect assessments and answer keys from student use, we need to have a "Restricted Access" Google Shared Drive that is for teachers only. You can get access to the restricted folders by requesting it through the PMSP website for each of our curricular areas. These requests are vetted to the best of our ability to ensure that it is a teacher that is requesting access and not a student.</p> <p>To request access to the Restricted Access materials for Patterns Biology please fill out the <a href="#">Restricted Access Application</a>.</p>  |
| <p>I used to be able to access some files before, but can't anymore.</p>  | <p>The Patterns Biology Council recently completed a review of materials, making updates and archiving older materials when appropriate. The newest materials reside in a Google Shared Drive: <a href="#">Patterns Biology - Open Access - PDXSTEM</a> and are viewable by anyone. If you do not have access to this Shared Drive (or its partner Restricted Access Shared Drive), request access by filling out the <a href="#">access application</a>.</p> <p>Please note that the Biology NGSS and Biology NGSS Teachers Only folders will be decommissioned at the end of the 2022-2023 school year. At that point, all relevant files will have been moved to the Google Shared Drive.</p>   |
| <p>Who do I contact if I have questions or comments about a lesson?</p>   | <p>You can provide feedback on a lesson or unit using the <a href="#">Patterns Lesson/Unit Feedback form</a>. You can also contact Susan Holveck (<a href="mailto:susan.holveck@pdxstem.org">susan.holveck@pdxstem.org</a>) who can send it to the appropriate Council for response.</p>   |
| <p>Who do I contact if I have a question about getting paid?</p>  | <p>Please contact Katie Windle (<a href="mailto:katie.windle@pdxstem.org">katie.windle@pdxstem.org</a>) if you have a question about payment or the payment process.</p>   |
| <p>Where do I go to find webinars and workshop offerings?</p>   | <p>Information about the webinars and workshops can be found in our <a href="#">Flyers</a> and on the PMSP <a href="#">website</a>.</p>  |
| <p>How does the virtual workshop differ from the in-person workshop?</p>  | <p>All webinars and workshops held during the school year are virtual. In the summer, we offer one week workshops, with virtual and in-person options. The in-person option allows for teachers to actually handle lab equipment and do experiments as students would do in the classroom. The virtual workshop tries to provide a similar experience, but it will be different. We are working to improve the virtual workshops, as we know that for many people traveling to the Portland Metro Area for a week to attend an in-person workshop is not a viable option. Both the virtual and in-person workshops go over the main ideas of the units and provide opportunities to be both a student and reflect as a teacher for the first two units of the Patterns course.</p> |

I will have to miss a day of a workshop. Should I still sign up?

Yes, we try to accommodate everyone's needs and realize that life is happening. You can still attend. Just let your instructor know, so that they can give you access to the materials that were used on that day.